

Amendments to the Specification:

Please replace the paragraph beginning at page 22, section [0055], with the following rewritten paragraph:

The surface acoustic wave element 3 for reference also consists of, similar to the surface acoustic wave element 2 for detecting pressure, an IDT 6a 3a formed on the surface of the sensor substrate 1 and reflectors 6b 3b formed on both sides in a surface acoustic wave propagation direction of the IDT 6a 3a. The method of manufacturing is the same as that for the surface acoustic wave element 2 for detecting pressure.

Please replace the paragraph beginning at page 23, section [0056], with the following rewritten paragraph:

A junction 8 is annularly formed on the surface of the sensor substrate 1 so as to surround the surface acoustic wave element 2 for detecting pressure and the surface acoustic wave element 3 for reference. The junction 8 can be formed from the same material by the same method as those for the IDTs 2a and 6a 3a and the reflectors 2b and 6b 3b. The surface thereof is subjected to Ni plating or Au plating. For improvement in adhesion strength, preferably, the film thickness of the junction 8 is formed thick.

Please replace the paragraph beginning at page 27, section [0073], with the following rewritten paragraph:

The surface acoustic wave element 2 for detecting pressure formed on the thin portion lower surface of the sensor substrate 1 deforms when it receives an external pressure, changes its surface acoustic wave propagation speed at the deformed portion, and changes the intervals between electrode fingers of the IDT of

the surface acoustic wave element 2 for detecting pressure, and due to these actions, the resonance frequency changes. Therefore, a pressure change can be detected based on a change in resonance frequency of the surface acoustic wave element 7a.

Please replace the paragraph beginning at page 42, section [0128], with the following rewritten paragraph:

According to this pressure sensor device, the damping member 16 that blocks transmission of surface acoustic waves or lowers the intensities of surface acoustic waves is disposed between the surface acoustic wave element 2 for detecting pressure and the surface acoustic wave element 3 for reference on the surface of the sensor substrate 1, and therefore, even when the elements are disposed close to each other so that the carrier waves of the surface acoustic waves advance on the same line for downsizing the pressure sensor device, carrier waves that could not be reflected by the reflectors and leak are absorbed well by the damping member 16 positioned between the surface acoustic wave element 2 for detecting pressure and the surface acoustic wave element 3 for reference. Therefore, the carrier waves which leak and the carrier waves of the surface acoustic wave element 2 3 for reference or the surface acoustic wave element 3 2 for detecting pressure close to the carrier waves which leak rarely interfere with each other, and as a result, pressure measurement can be accurately performed.

Please replace the paragraph beginning at page 54, section [0159], with the following rewritten paragraph:

To the electrode pads 10 formed to be electrically connected to the IDT electrodes 21, metal thin wires and bumps that make electrical connection to the exterior are joined to perform a function of externally applying a predetermined external voltage to the IDT electrode 21.

Attorney Docket No.81872.0114
Express Mail Label No. EV 691 879 968 US
Customer No.: 26021

Please replace the paragraph beginning at page 58, section [0175], with the following rewritten paragraph:

In the pressure sensor device of Figs. 17, resonance characteristics before pressure fluctuation (atmospheric pressure state) and after pressure fluctuation (pressurized state) are shown in Fig. 19. The vertical axis of Fig. 19(b) shows insertion loss (dB) and the horizontal axis shows frequency (MHz).